

4919/USSN 09/441,231
Group Art Unit 2672

2001. Applicant requests initialed page 2 of 2 of PTO 1449 also be provided.

The Examiner requires restriction to one of the following inventions under 35 U.S.C. 121:

- (I) Claims 1-21, 25 and 26, drawn to displaying a series of images according to a user's position relative to a display screen;
- (II) Claims 22-24 and 27, drawn to transmitting a series of images to increase fidelity of transmission; and
- (III) Claims 28 and 29, drawn to increasing the scale of a portion of a displayed object.

Applicant confirms the election of Group I, i.e., claims 1-21 and 25-26. Applicant reserves the right to file divisional applications as to the non-elected subject matter.

The Examiner has requested review and correction of informalities in the specification. Responsive thereto, applicant has amended the specification to correct the noted informalities.

Claims 1-9 and 25 are rejected under 35 U.S.C. §103(a) as being unpatentable over Broemmelsiek (U.S. Patent No. 5,574,836) in view of Goldberg et al (U.S. Patent No. 5,963,203). Withdrawal of the rejection is respectfully requested.

Broemmelsiek teaches an interactive display apparatus for viewing an object from multiple angles and changing the position at which the object is viewed so as to simulate an interactive three-dimensional viewing environment. Abstract, lines 4-6. The purpose of the invention is to provide a viewer with a relative view or parallax perspective of the displayed object in a common desktop computer display device. Column 1, lines 20-22. Multiple objects can also be displayed and their positions relative to one another changed to produce a parallax effect. Column 6, lines 10-15. As such, movement of objects relative to their changing position on a display shows the objects moving with respect to a fixed point outside of the object itself, whereby each object moves individually, a front object is fixed or a rear-most object is fixed. Column 7, line 59-column 8, line 7. In short, Broemmelsiek teaches objects shifting position relative to one another.

In contrast, Goldberg et al teaches an interactive video icon with designated viewing position for viewing multiple two-dimensional images of an object including a root image object as if it were three-dimensional. Abstract; column 5, lines 39-48. As multiple images or frames are seen as a single object, further away images in the object remain partially occluded by frames in front as

each individual frame is represented by a plane since the planes lie one behind the other. Column 3, line 66 to column 4, line 7. Thus, the three-dimensional root image object composed of multiple frames is simply displayed from different perspectives. Column 5, lines 8-37.

The Examiner states that the motivation for combining Broemmelsiek and Goldberg et al would have been to provide the motion of an object and to view angle change between the object and a viewer. Applicant respectfully disagrees and submits that in view of the teachings of Broemmelsiek and Goldberg et al, it would not have been obvious to one skilled in the art to combine these teachings to obtain the claimed invention in view of the field of invention of Broemmelsiek not being analogous to the field of invention of Goldberg et al. No suggestion is present to motivate one to make the modifications necessary to obtain the claimed invention.

Broemmelsiek teaches providing a viewer with a relative view or parallax perspective of displayed objects in order to simulate an interactive, three-dimensional viewing environment. Abstract, lines 4-6; column 1, lines 20-22. More particularly, Broemmelsiek describes one of a multiple of windows on a screen having an object animated by cycling through images. That is, Broemmelsiek teaches providing a parallax effect whereby one of the windows

affected by the parallax effect includes animation of images. Goldberg et al, on the other hand, teaches the formation and display of a root image consisting of a plurality of basic frames selected from video information when a display view of the root image changes in accordance with a designated viewing position, as if the root image were a three-dimensional object. Abstract, lines 2-11. As such, Goldberg et al teaches displaying an object formed of multiple images from different angles and viewpoints. This is completely different from the field of art of Broemmelsiek. Since Broemmelsiek and Goldberg et al are directed to different fields and focus on different problems, applicant respectfully submits that no motivation exists for combining the references. Accordingly, applicant respectfully requests withdrawal of the rejection.

Claims 10-21 and 26 are rejected under 35 U.S.C. §103(a) as being unpatentable over Broemmelsiek in view of Goldberg et al and further in view of Davidson et al (U.S. Patent No. 6,208,349). Withdrawal of the rejection is respectfully requested.

Davidson et al teaches a multi-dimensional controller for manipulating multi-dimensional information in a multi-dimensional viewing display. Column 2, lines 17-19; column 4, lines 44-52. The controller provides manipulation and control of a base viewing location, a base viewing

orientation and a relative viewing orientation within a multi-dimensional space such that the base viewing orientation and the relative viewing orientation are combined to determine a desired viewing orientation. Column 2, lines 20-31. In short, the information for display is already multi-dimensional, and Davidson et al simply provides a device which makes interaction with the multi-dimensional information easier.

The Examiner states that the motivation for combining Broemmelsiek and Goldberg et al would have been to provide the motion of an object and to view angle change between an object and viewer. The Examiner further states that the motivation for combining Broemmelsiek and Davidson et al would have been to provide an efficient method for providing a simulated interactive device based on the positions of a viewer. Applicant respectfully disagrees and submits that in view of the teachings of Broemmelsiek, Goldberg et al and Davidson et al, it would not have been obvious to one skilled in the art to combine the teachings thereof and obtain the claimed invention in view of the fields of invention of Broemmelsiek, Goldberg et al and Davidson et al not being analogous. No suggestion is present to motivate one to make the modifications necessary to obtain the claimed invention.

As stated above, Broemmelsiek teaches providing a viewer with a relative view or parallax perspective of displayed objects in order to simulate an interactive, three-dimensional viewing environment. Thus, Broemmelsiek describes one of a multiple of windows on a screen having an object animated by cycling through images. In contrast, Goldberg et al teaches the formation and display of a root image consisting of a plurality of basic frames selected from video information wherein the display view of the root image changes in accordance with a designed viewing position, as if the root image were a three-dimensional object. As set forth above, no motivation exists for combining the teachings of Broemmelsiek with the teachings of Goldberg et al, in particular to provide the claimed invention.

Similarly, no motivation exists for combining the teachings of Broemmelsiek with the teachings of Davidson et al. In contrast to Broemmelsiek, Davidson et al teaches a multi-dimensional controller for manipulating multi-dimensional information. Column 2, lines 17-19. As such, Davidson et al teaches displaying multi-dimensional information on a multi-dimensional display with a multi-dimensional controller. This is completely different from the teachings of Broemmelsiek, the purpose of which is to provide a viewer with a relative view or parallax

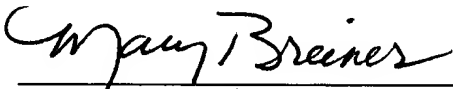
4919/USSN 09/441,231
Group Art Unit 2672

perspective of a displayed object. As such, Broemmelsiek, Goldberg et al and Davidson et al concern different fields and focus on different problems, i.e., parallax display of multiple objects; formation and display of a single three-dimensional object; and control and display of multi-dimensional information, respectively. Applicant respectfully requests withdrawal of the rejection.

Reconsideration and allowance of the application is respectfully urged.

Respectfully submitted,

RAYMOND M. BROEMMELSIEK

By 

Mary J. Breiner, Attorney
Registration No. 33,161
115 North Henry Street
P.O. Box 19290
Alexandria, Virginia 22320-0290

Telephone (703) 684-6885

Attachment - Marked-Up Version of Specification

MARKED-UP VERSION OF SPECIFICATION

At page 2, amend the paragraph at lines 7-15 to read as follows:

"The interactive 3D media types available that are compatible with Internet resource limitations (i.e. QuicktimeVR by Apple Corp. and 360 by IPIX Corp.) require [labour] labor intensive production or special capture equipment. This increases the cost of producing these interactive 3D media types. Further, user navigation of these 3D media types uses a mouse, which is not an intuitive navigation tool, especially when viewing images of a scene. Additionally, these media types require media transmission to be completed before viewing or interacting with the media. In cases where the size of the media is large, this creates a long time delay before the images can be viewed."

At page 4, amend the paragraph at lines 5-10 to read as follows:

"In accordance with one object of the present invention there is provided a method of displaying a series of images according to a user's position relative to a display screen comprising the steps of: displaying a first image from the series of images, receiving information regarding a change in the user's position relative to the display screen, and displaying a second

4919/USSN 09/441,231
Group Art Unit 2672

image from the series of images in response to the
change in the user's position."